

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-323323

(43)Date of publication of application : 26.11.1999

(51)Int.Cl.

C09K 11/06  
H05B 33/14

(21)Application number : 10-138829

(71)Applicant : TOPPAN PRINTING CO LTD

(22)Date of filing : 20.05.1998

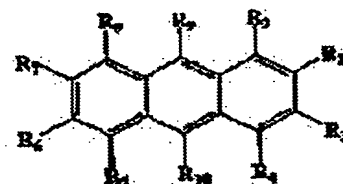
(72)Inventor : SAKAKI YUICHI  
ITO YUICHI

## (54) LUMINESCENT MATERIAL

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide amorphous blue luminescent materials with excellent heat-resistance and aging stability obtained by reacting anthraquinone derivatives with halogenated aryl compounds, and thereafter subjecting the resultant to cyclodehydration.

**SOLUTION:** Luminescent materials having anthracene rings as the base backbone, represented by the formula (wherein R1-R8 are each H, alkyl or alkoxy, and R9-R10 are each naphthyl, anthryl, phenanthryl, biphenyl or terphenyl which may have a substituting group selected from alkyl and alkoxy) are obtained by reacting anthraquinone derivatives with halogenated aryl compounds in a diethyl ether solvent in the presence of butyllithium, and subjecting the resulting compounds to cyclodehydration under acid conditions using potassium iodide and sodium phosphinate. Thus, amorphous luminescent elements with hardly crystallizing property and excellent in heat-stability and durability can be obtained.



## LEGAL STATUS

[Date of request for examination]

15.03.2002

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

